

Title (en)
Durable sputtered films of metal alloy oxides.

Title (de)
Dauerhafte zerstäubte Filme aus Oxiden von Metallegierungen.

Title (fr)
Films pulvérisés durables à base d'oxydes d'alliages métalliques.

Publication
EP 0226993 B2 19951129 (EN)

Application
EP 86117415 A 19861215

Priority
US 81268085 A 19851223

Abstract (en)
[origin: EP0226993A1] A multiple layer high transmittance, low emissivity coated article is disclosed with improved chemical resistance as a result of a protective overcoat of titanium oxide.

IPC 1-7
C03C 17/36

IPC 8 full level
C23C 14/08 (2006.01); **B32B 15/04** (2006.01); **C03C 17/36** (2006.01); **C23C 14/18** (2006.01); **C23C 14/34** (2006.01); **G02B 5/20** (2006.01)

CPC (source: EP KR US)
C03C 17/36 (2013.01 - EP US); **C03C 17/3613** (2013.01 - EP US); **C03C 17/3618** (2013.01 - EP US); **C03C 17/3644** (2013.01 - EP US); **C03C 17/3652** (2013.01 - EP US); **C03C 17/366** (2013.01 - EP US); **C03C 17/3681** (2013.01 - EP US); **C23C 14/08** (2013.01 - EP US); **C23C 14/18** (2013.01 - EP US); **C23C 14/34** (2013.01 - KR); **G02B 1/116** (2013.01 - EP US); **G02B 1/14** (2015.01 - US); **G02B 5/208** (2013.01 - EP US); **C03C 2217/73** (2013.01 - EP US); **C03C 2217/78** (2013.01 - EP US); **Y10T 428/12597** (2015.01 - EP US); **Y10T 428/12604** (2015.01 - EP US); **Y10T 428/12611** (2015.01 - EP US); **Y10T 428/12618** (2015.01 - EP US)

Cited by
US5709938A; DE3806124A1; EP0335309A1; US5965278A; US5552180A; EP0332717A1; DE4135701A1; EP2801556A1; US5110662A; DE3941027C2; DE19848751C1; US5902505A; US5861189A; EP0686093A4; EP0939062A1; EP0536607A3; EP0275474A1; US5705278A; EP0336257A3; EP0339274A1; CN11111140C; US4859532A; EP0803481A3; GB2229738A; US5153054A; GB2229738B; DE3941026C2; US6306525B1; US6365014B2; US6793781B2; US6579427B1; WO9529136A1; WO02076901A1; WO9928258A1; WO9621630A1; WO9621631A1; US6274244B1; US6623794B2; US6541133B1; US6783876B2; FR2856627A1; US9884783B2; EP1615856A1

Designated contracting state (EPC)
AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)
EP 0226993 A1 19870701; EP 0226993 B1 19900704; EP 0226993 B2 19951129; AT E54300 T1 19900715; AU 571380 B2 19880414; AU 6654986 A 19870625; CA 1327294 C 19940301; CN 1019319 B 19921202; CN 86108656 A 19870923; DE 3672462 D1 19900809; DK 166536 B1 19930607; DK 618586 A 19870624; DK 618586 D0 19861219; ES 2015525 B3 19900901; ES 2015525 T5 19960116; FI 865262 A0 19861222; FI 865262 A 19870624; FI 90050 B 19930915; FI 90050 C 19931227; GR 3000824 T3 19911115; HK 67592 A 19920918; IN 169768 B 19911221; JP H0745710 B2 19950517; JP S62196366 A 19870829; KR 870006232 A 19870710; KR 900003979 B1 19900607; MY 101707 A 19920117; NO 174286 B 19940103; NO 174286 C 19940413; NO 865236 D0 19861222; NO 865236 L 19870624; NZ 218479 A 19900327; US 4716086 A 19871229; ZA 869153 B 19880603

DOCDB simple family (application)
EP 86117415 A 19861215; AT 86117415 T 19861215; AU 6654986 A 19861212; CA 525076 A 19861211; CN 86108656 A 19861223; DE 3672462 T 19861215; DK 618586 A 19861219; ES 86117415 T 19861215; FI 865262 A 19861222; GR 900400491 T 19900718; HK 67592 A 19920910; IN 1094DE1986 A 19861212; JP 30619386 A 19861222; KR 860011072 A 19861222; MY PI19860236 A 19861223; NO 865236 A 19861222; NZ 21847986 A 19861202; US 81268085 A 19851223; ZA 869153 A 19861203